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EXAMINER

ELMORE, JOHN E

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,471

Applicant(s)

LONDON ET AL.

Examiner

John Elmore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ♦
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 are examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "substantially faster" (line 14) in claim 1 is a relative term which renders the claim indefinite. The term "substantially faster" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In the interest of compact prosecution, this limitation is subsequently treated as reading "faster" for the purpose of further examination. Claims 2-11 are rejected by virtue of their dependence on claim 1.

The term "likely to be" (line 4) in claim 8 is a relative term which renders the claim indefinite. The term "likely to be" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In the interest of compact prosecution, the limitation "so that the specified online content sources for which the data cache is provided on the physical medium are likely to be of interest to

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and selected for display by members of said class to whom the physical medium is distributed" is subsequently ignored for the purpose of further examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-3, 12, 19, and 25 are rejected under 35 U.S.C. 102(b)** as being anticipated by Slik et al, hereinafter Slik (USPN 5,809,145 – published September 15, 1998).

Regarding independent claim 1, Slik discloses a method for increasing a speed with which at least a portion of an online content stored at a first location is displayed to a user at a second location connected in communication with the first location over a network (column 5, lines 58-62, and column 6, lines 42-54), comprising the steps of:

(a) storing data for said at least the portion of the online content as part of a data cache on a physical medium (data requested is stored on CD-ROM or other physical medium; see column 5, lines 58-62, and column 6, lines 19-41) that includes data for a plurality of specified online content sources (fulfillment center-assembles data from a plurality of specified online content sources; see column 6, lines 13-19 and 42-54, and column 16, lines 17-20);

(b) distributing the physical medium on which is stored the data cache for

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the plurality of specified online content sources to the user (column 6, lines 22-23); and

(c) when the user at the second location has connected to the first location and has selectively chosen to display the online content, displaying the online content to the user with the data for said at least the portion of the online content included in the data cache, said online content being displayed to the user faster using the data that were stored in the data cache on the physical medium than if all data for the online content were instead transferred over the network from the first location to the second location (column 16, lines 17-23).

Regarding dependent claim 2, Slik further discloses the steps of:

(a) encrypting data for the plurality of online content sources stored in the data cache of the physical medium prior to the step of distributing (column 6, lines 19-23);
and

(b) decrypting the data for said at least the portion of the online content prior to the step of displaying the online content to the user (column 7, lines 15-16 and 33-38).

Regarding dependent claim 3, Slik further discloses the steps of:

(a) compressing data for the plurality of online content sources that are stored in the data cache of the physical medium prior to the step of distributing (column 14, lines 41-48); and

(b) decompressing the data for said at least the portion of the

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online content prior to the step of displaying the online content to the user (column 13, lines 27-31).

Regarding independent claim 12, Slik discloses a method for enabling subscribers to a service to more rapidly display each of a plurality of specified online content sources, comprising the steps of:

(a) periodically collecting and storing data for each of the plurality of specified online content sources on a storage at a data center (fulfillment center; column 6, lines 9-19);

(b) replicating the data for the plurality of specified online content sources that are stored in the storage as a data cache stored on a plurality of distributable physical storage media (data stored on CD-ROMs and other physical media; see column 6, lines 19-22);

(c) distributing a physical storage medium on which the data cache is stored, to each subscriber of the service (CD-ROMs and other physical media are distributed to subscribers; see column 6, lines 22-30); enabling each subscriber to install

(d) a proxy program that serves as an interface between the data cache that was received on the physical storage medium, a network over which online content sources are accessed, and a browser program with which online content sources are displayed to the subscriber (kernel and modules interface with cache and provide for browsing the dataset as a web browser; see column 8, lines 39-51; column 12, line 66, through column 13, line 25; column 13, lines 51-60; and column 14, lines 16-23); and

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(e) for an online content that is being selectively accessed over the network by a subscriber, using any data for said online content that are included in the data cache received on the physical storage medium to speed the display of the online content with the browser program, by avoiding the need to transfer the data over the network from a site at which the online content is being accessed (data retrieved from location that requires least amount of time, whether from cache or over the network; see column 16, lines 17-23).

Regarding dependent claim 19, a method comprising each of the limitations has already been addressed (relative to claim 12). Therefore, for reasons applied above, such a claim also is anticipated.

Regarding dependent claim 25, a method comprising each of the limitations has already been addressed (relative to claim 1). Therefore, for reasons applied above, such a claim also is anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 4-7, 9, 13, 15, 16, 18, 20, 22, 23, and 26 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Slik in view of Wang ("A Survey of Web Caching Schemes for the Internet," ACM Computer Communication Review, October 1999).

Regarding dependent claim 4, Slik teaches all the elements of claim 1, and further teaches the step of

(a) providing a software program enabling the user to access the data cache stored on the physical medium (column 8, lines 39-46; column 14, lines 16-23; and column 15, 34-45); and

(b) determining a storage date of the data for said at least the portion of the online content included in the data cache, using the software program (date created; see column 16, lines 1-12).

(c) selectively accessing the data for said at least the portion of the online content included in the data cache prior to the step of displaying the online content to the user (access data cache; column 15, lines 37-67, and column 16, lines 17-23); and if not,

(d) transferring all of the data for the online content from the first location to the second location, to display the online content to the user (access data from web servers via fulfillment center (first location) if valid cache version is unavailable (at second location); column 6, lines 29-37; column 15, lines 37-67, and column 16, lines 17-23).

But Slik does not explain that data is selectively accessed from the data cache only if the storage date of said data is the same as a date for the online content at the first location.

However, Wang teaches that data is selectively accessed from the data cache only if the storage date of said data is the same as a date for the online content at the

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first location in order to maintain coherence of the cached data with the source data (polling-every-time cache coherence using conditional HTTP GET where the date provided for the if-modified-since field is the storage date of the cached data; see section 2, paragraph 1, and section 4.5.1).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang to selectively access data from the data cache only if the storage date of said data is the same as a date for the online content at the first location. One would be motivated to do so in order to maintain coherence of the cached data at the second location with the source data at the first location.

Regarding dependent claim 5, Slik and Wang teach all the elements of claims 1 and 4, and further teach the step of enabling the software program to interface with a browser in which the online content is displayed, said software program controlling whether data used for displaying the online content is received from the first location or obtained from the data cache (user interface module acts as a browser which permits web browsing and supports conventional web browser plug-ins; column 12, lines 25-54; column 13, lines 46-60, and column 14, lines 54-67).

Regarding dependent claim 6, Slik and Wang teach all the elements of claims 1 and 4, and further teach the step of enabling the software program to collect usage information regarding online content sources selected by the user for display, for transmission over the network to a service program running at a third location, said usage information being employed by the service to determine a new plurality of

specified web sites that will be stored in a data cache on another physical medium, for subsequent distribution to the user (usage information collected in customer database by third party and used for marketing new data to users based on their usage history; see column 7, lines 49-61).

But Slik and Wang, as applied to claims 1 and 4, do not explain that the usage information is employed by the service to determine a new plurality of specified web sites for which data will be stored in a data cache on another physical medium, for subsequent distribution to the user.

However, Wang further teaches that the usage information is employed by the service to determine a new plurality of specified web sites in order to reduce client latency (pre-fetching of web sites based on user access pattern prediction and usage history; see sections 4.3, 4.3.1, and 4.3.2).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik and Wang with the further teaching of Wang to employ usage information by the service to determine a new plurality of specified web sites for which data will be stored in a data cache on another physical medium, for subsequent distribution to the user. One would be motivated to do so in order to reduce client latency.

Regarding dependent claim 7, Slik teaches all the elements of claim 1, but Slik does not explain the step of periodically distributing to the user another physical medium on which an updated data cache is stored for a new plurality of specified online content sources.

However, Wang further teaches that the data cache must be updated periodically in order to maintain coherency between the cache and the online content sources (coherency of web cache; see section 4.5).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang to include the step of periodically distributing to the user another physical medium on which an updated data cache is stored for a new plurality of specified online content sources. One would be motivated to do so in order to maintain coherency between the cache and the online content sources, wherein the cache is stored on a physical medium that must be distributed to the user for each update.

Regarding dependent claim 9, Slik teaches all the elements of claim 1, and further teaches that the user (at the second location) receives data not only from the second location (fulfillment center) but also a third location (other sources, including web servers on the Internet; see column 15, lines 37-67, and column 16, lines 17-23).

But Slik does not explain the step of updating the data cache with new data for the specific online content sources, said step of updating occurring as a background task that is executed at a time when other data are not being transferred over the network to the second location.

However, Wang teaches that the data cache must be updated periodically in order to maintain coherency between the cache and the online content sources (coherency of web cache; see section 4.5). And official notice is taken with regards updating occurring as a background task that is executed at a time when other data are

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not being transferred over the network to the second location, as running tasks in the background in order to utilize the network when traffic is low is a form of load balancing and a common means of circumventing the problem of increased latency that arises during periods of heavy network traffic.

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang to update the data cache with new data for the specific online content sources, said step of updating occurring as a background task that is executed at a time when other data are not being transferred over the network to the second location. One would be motivated to do so in order to maintain coherence of the cached data at the second location with the source data while also minimizing latency.

Regarding dependent claim 13, a method comprising each of these limitations has already been addressed (relative to claim 6). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 15, a method comprising each of these limitations has already been addressed (relative to claim 9). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 16, Slik teaches all the elements of claim 12, but does not explain using the proxy program to determine whether the data included in the data cache distributed on the physical medium for a uniform resource locator (URL) on an online content being accessed by a subscriber are current, by communicating with the data center over the network to validate said data.

However, Slik teaches that the cached data is available to the client (proxy program) via direct download from the data center (download from fulfillment center; see column 6, lines 29-41). And Wang teaches that the data cache must be current with the online content source in order to maintain coherency (see Wang, section 4.5) and that one means to check currency is for the proxy to use send a conditional GET command to the data center (fulfillment center) with the date of the cache used in the If-Modified-Since header (see Wang, sections 4.5.1 and 4.5.2 (strong cache consistency)).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang to include using the proxy program to determine whether the data included in the data cache distributed on the physical medium for a uniform resource locator (URL) on an online content being accessed by a subscriber are current, by communicating with the data center over the network to validate said data. One would be motivated to do so in order to maintain cache coherency.

Regarding dependent claim 18, a method comprising each of the limitations has already been addressed (relative to claim 5). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 20, a method comprising each of the limitations has already been addressed (relative to claim 6). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 22, a method comprising each of the limitations has already been addressed (relative to claims 2 and 5). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 23, a method comprising each of the limitations has already been addressed (relative to claims 3 and 5). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 26, a method comprising each of the limitations has already been addressed (relative to claim 6). Therefore, for reasons applied above, such a claim also would have been obvious.

5. **Claim 8 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Slik in view of Wang, and further in view of Knowlton (USPN 6,141,006 – published October 31, 2000).

Slik teaches all the elements of claim 1, and but does not explain the step of selecting the specified online content sources based upon a class of which the user is a member.

However, Slik teaches that content providers market data that pertains to a particular subset of users, such as earth imaging data (column 6, lines 9-15). And Knowlton teaches selecting the specified online content sources based upon a class of which the user is a member in order to control access based on a group attribute, such as age, rather than the individual (data associated with visual link objects (VLOs), which

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facilitate the compilation and exchange of online data, are selected and authorized based upon a class of which user is a member; see column 49, lines 22-42).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Knowlton to include the step of selecting the specified online content sources based upon a class of which the user is a member. One would be motivated to do so in order to control and market access to data based on the group attribute or need of a class of users.

6. **Claims 10, 11, 17, 21, 24, 27 and 28 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Slik in view of Wang, and further in view of Chinen et al, hereinafter Chinen, ("An interactive Prefetching Proxy Server for Improvement of WWW Latency," Proceedings of INET '97, June 1997, as cited by Wang in section 4.3.2.).

Regarding dependent claim 10, Slik teaches all the limitations of claim 1, but does not explain the steps of:

(a) responding to the user requesting display of the online content by parsing the data stored in the data cache for the online content to identify uniform resource locators (URLs) referenced therein;

(b) requesting a timestamp for said URLs over the network from a service program that is executing at a third location;

(c) responding to a reply received from the service program that indicates

whether the data cache for the online content is current for each URL, by obtaining data for the URL from the data cache if the data for the URL is current in the data cache; and otherwise,

(d) obtaining the data for the URL over the network.

However, Wang and Chinen teach a method of web caching comprising the steps of:

(a) responding to the user requesting display of the online content by parsing the online content to identify uniform resource locators (URLs) referenced therein in order to improve caching performance (referenced URLs within a requested web page are parsed and pre-fetched; see Chinen, page 4, last paragraph, as cited by Wang in section 4.3.2);

(b) requesting a timestamp for said URLs over the network from a service program that is executing at a third location in order to maintain cache coherence (proxy uses GET command to retrieve a timestamp, notably the Last-Modified date; see Wang, section 4.5.1);

(c) responding to a reply received from the service program that indicates whether the data cache for the online content is current for each URL, by obtaining data for the URL from the data cache if the data for the URL is current in the data cache; and otherwise, (d) obtaining the data for the URL over the network (proxy uses conditional GET command with date of the cached copy as an argument in order to retrieve data for the URL over the network or, if the network version is not more recent, from the cache; see Wang, sections 4.5.1 and 4.5.2).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang and Chinen to include the steps of:

(a) responding to the user requesting display of the online content by parsing the data stored in the data cache for the online content to identify uniform resource locators (URLs) referenced therein;

(b) requesting a timestamp for said URLs over the network from a service program that is executing at a third location;

(c) responding to a reply received from the service program that indicates whether the data cache for the online content is current for each URL, by obtaining data for the URL from the data cache if the data for the URL is current in the data cache; and otherwise,

(d) obtaining the data for the URL over the network.

One would be motivated to do so in order to improve cache performance and maintain coherency between the cache and the online content sources.

Regarding dependent claim 11, Slik teaches all the limitations of claim 1, but does not explain the steps of:

(a) transmitting a uniform resource locator (URL), for the online content selected by a user for display, over the network to a service program being executed at a third location;

(b) creating a prefetch list of other URLS referenced on the online content;

(c) transmitting the prefetch list from the third location to the second location; and

(d) preloading data conveyed over the network into a prefetch cache at the second location, for at least one URL in the prefetch list, so that the data for said at least one URL is already available in the prefetch cache at the second location and can more rapidly be displayed to the user if said at least one URL is selected for display by the user from within the online content.

However, Wang, and Chinen teach a prefetching method for the purpose of improving cache performance (see Wang, section 4.3, first paragraph) and reduce online transmission latency (see Chinen, page 2, paragraph 3) comprising the steps of:

(a) transmitting a uniform resource locator (URL), for the online content selected by a user for display, over the network to a service program being executed at a third location (prefetching proxy receives request for web document from client; see Chinen, page 2, paragraph 3, and page 4, last paragraph);

(b) creating a prefetch list of other URLs referenced on the online content (system gathers references to other pages in a web document before it prefetches those pages; see Chinen, page 2, paragraph 7, and page 4, last paragraph);

(c) transmitting the prefetch list from the third location to the second location (prefetch list of URLs transmitted to client in the form of a series of prefetched documents sent to client from proxy; see Chinen, page 2, paragraph 3, and page 4, last paragraph); and

(d) preloading data conveyed over the network into a prefetch cache at the second location (two methods disclosed: (i) client prefetches documents directly and (ii) proxy pushes preloaded documents to client; see Wang, sections 4.3.1 and 4.3.2, respectively).

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik with the teaching of Wang and Chinen to include the steps of:

(a) transmitting a uniform resource locator (URL), for the online content selected by a user for display, over the network to a service program being executed at a third location;

(b) creating a prefetch list of other URLs referenced on the online content;

(c) transmitting the prefetch list from the third location to the second location; and

(d) preloading data conveyed over the network into a prefetch cache at the second location, for at least one URL in the prefetch list, so that the data for said at least one URL is already available in the prefetch cache at the second location and can more rapidly be displayed to the user if said at least one URL is selected for display by the user from within the online content.

One would be motivated to do so in order to improve cache performance and reduce online latency.

Regarding dependent claim 17, a method comprising each of the limitations (a), (b), and (c) has already been addressed (relative to claim 11). As per step (d),

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official notice is taken with regards to the prefetching as a background task, as running tasks in the background in order to utilize the network when traffic is low is a form of load balancing and a common means of circumventing the problem of increased latency that arises during periods of heavy network traffic. Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 21, a method comprising each of the limitations has already been addressed (relative to claim 17). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 24, a method comprising each of these limitations has already been addressed (relative to claim 9). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 27, a method comprising each of the limitations has already been addressed (relative to claim 11). Therefore, for reasons applied above, such a claim also would have been obvious.

Regarding dependent claim 28, a method comprising each of the limitations has already been addressed (relative to claim 11). Therefore, for reasons applied above, such a claim also would have been obvious.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slik in view of Wang, and further in view of Knowlton.

Slik and Wang teach all the elements of claims 12 and 13, but do not explain the step of employing the usage data in determining, for each of a plurality of different

classes of subscribers, online content sources that are included in the plurality of specific online content sources for which data will be collected for distribution on the physical storage media to members of each class of subscribers, the specific online content sources for each class of subscribers including data for online content sources that are more frequently selected by members of that class for display with the browser program.

However, Wang further teaches that the usage information is employed by the service to determine a new plurality of specified web sites in order to reduce client latency (pre-fetching of web sites based on user access pattern prediction and usage history; see sections 4.3, 4.3.1, and 4.3.2). And Knowlton teaches the step of selecting the specified online content sources based upon a class of which the user is a member in order to control access based on a group attribute, such as age, rather than the individual (data associated with visual link objects (VLOs), which facilitate the compilation and exchange of online data, are selected and authorized based upon a class of which user is a member; see column 49, lines 22-42). And

Therefore, it would be obvious to a person of ordinary skill in the computer art at the time the invention was made to modify the method of Slik and Wang with the teaching of Knowlton to employ the usage data in determining, for each of a plurality of different classes of subscribers, online content sources that are included in the plurality of specific online content sources for which data will be collected for distribution on the physical storage media to members of each class of subscribers, the specific online content sources for each class of subscribers including data for online content sources

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that are more frequently selected by members of that class for display with the browser program. One would be motivated to do so in order to reduce client latency among different users based on a group attribute or need.


Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Elmore whose telephone number is 571-272-4224. The examiner can normally be reached on M 10-8, T-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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